

***FlyBy Math™* Alignment to
Wyoming Mathematics Content and Performance Standards
Adopted July 7, 2003**

Content Standard 1: Number Operations and Concepts

Students use numbers, number sense, and number relationships in a problem-solving situation.

Benchmark	<i>FlyBy Math™</i> Activities
4. Students explain their choice of estimation or problem-solving strategies and justify results when performing number operations in problem-solving situations.	<p>--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.</p> <p>--Predict outcomes and explain results of mathematical models and experiments.</p>

Content Standard 2: Geometry

Students apply geometric concepts, properties, and relationships in problem-solving situations.

Benchmark	<i>FlyBy Math™</i> Activities
4. Students select, use, and communicate organizational methods in problem-solving situations appropriate to grade level.	<p>--Explain and justify solutions regarding the motion of two airplanes using the results of plotting points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system.</p> <p>--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.</p>

Content Standard 3: Measurement

Students use a variety of tools and techniques in measurement in a problem-solving situation.

Benchmark	<i>FlyBy Math™</i> Activities
1. Students apply estimation and measurement of length to content problems using actual measuring devices and express the results in U.S. customary units (parts of an inch-halves/fourths, eighths inches, feet, yards, and miles).	--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.
6. Students use time, in problem-solving situations to: <ul style="list-style-type: none"> compare relationships among seconds, minutes, hours and days, and use elapsed time to the nearest minute. 	<p>--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.</p> <p>--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.</p>

Content Standard 4: Algebra

Students use algebraic methods to investigate, model, and interpret patterns and functions involving numbers, shapes, data, and graphs in a problem-solving situation.

Benchmark

1. Students recognize, describe, extend, create, and generalize patterns by using manipulatives, numbers, and graphic representations, including charts and graphs.

2. Students apply knowledge of patterns when solving problems appropriate to grade level.

FlyBy Math™ Activities

--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

Content Standard 5: Data Analysis and Probability

Students use data analysis and probability to analyze given situations and the results of experiments.

Benchmark

1. Students systematically collect, organize, and describe/represent categorical data using bar graphs.

FlyBy Math™ Activities

--Conduct simulation and measurement for several aircraft conflict problems.

--Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.